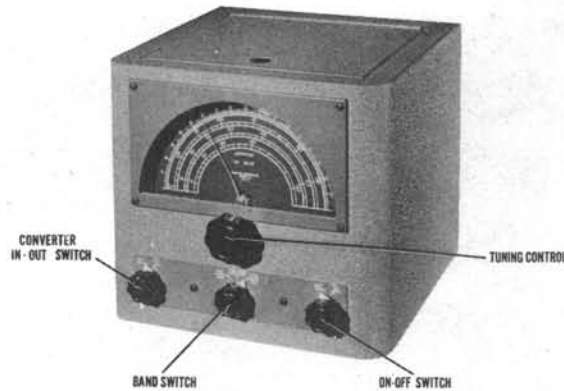


RME
MODEL HF10-20



RME MODEL HF10-20

TRADE NAME	RME, Model HF10-20
MANUFACTURER	Radio Mfg. Engineers, Inc., 300-306 1st Ave., Peoria, Ill.
TYPE SET	AC Operated Frequency Converter with Frequency of 7MC (Nominal) Out.
TUBES (FOUR)	Types, 6BA6 RF Amp., 6J6 Converter, VR150 Voltage Regulator, 5Y3G Rectifier.
POWER SUPPLY	110-120 Volts AC RATING .38 Amp. @ 117 Volts AC
SHORT WAVE	14.0-14.4MC. 21.0-21.5MC. 27.0-29.7MC

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

To set pointer turn tuning cap. fully closed and set pointer to last reference mark at low freq. end of dial.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1 Direct	High side to center stator of tuning cap. Low side to chassis.	6.95MC	14.0-14.4 (Counter-clock-wise)	Tuning cap. fully open.	Across voice coil of associated receiver.	A1	Adjust for maximum output.
2 300Ω Carbon Res.	High side to either 20 meter antenna terminal. Low side to other terminal.	14.4MC	"	14.4MC	"	A2	Adjust for maximum output. Tune sig. gen. to 28.3MC. If signal is not heard, retune sig. gen. to 14.4 MC and open A2 to next peak. Adjust for maximum output and recheck for image.
3 "	"	14.0MC	"	14.0MC	"	A3	Adjust for maximum output. Repeat Steps 2 & 3 until no further improvement can be made.
4 "	"	14.4MC	"	Tune for maximum output.	"	A4, A5	Rock tuning cap. and adjust A4 & A5 for maximum output.
5 "	High side to either 15 meter ant. terminal. Low side to other terminal.	21.5MC	21.0-21.5MC (center position)	21.5MC	"	A6	Adjust for maximum output. Tune sig. gen. to 35.4MC. If signal is not heard, retune sig. gen. to 21.5 MC and open A6 to next peak. Adjust for maximum output and recheck for image.
6 "	"	21.0MC	"	21.0MC	"	A7	Adjust for maximum output. Repeat Steps 5 & 6 until no further improvement can be made.
7 "	"	21.5MC	"	Tune for maximum output.	"	A8, A9	Rock tuning cap. and adjust A8 & A9 for maximum output.
8 "	High side to either 10 meter ant. terminal. Low side to other terminal.	29.7MC	27-29.7MC (clock-wise)	29.7MC	"	A10	Adjust for maximum output. Tune sig. gen. to 43.6MC. If signal is not heard, retune sig. gen. to 29.7 MC and open A10 to next peak. Adjust for maximum output and recheck for image.
9 "	"	27.0MC	"	27.0MC	"	A11	Adjust for maximum output. Repeat Steps 8 & 9 until no further improvement can be made.
10 "	"	29.7MC	"	Tune for maximum output.	"	A12, A13	Rock tuning cap. and adjust A12 & A13 for maximum output.

HOWARD W. SAMS & CO., INC. • 2924 East Washington Street • Indianapolis 7, Indiana

"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed."

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DATE 11/48-#4819-17 SET #49-FOLDER #17

MODEL HF10-20

www.everything4lessstore.com

PARTS LIST AND DESCRIPTIONS

RME MODEL
HF10-20

CHASSIS—TOP VIEW

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			INSTALLATION NOTES
		RME PART No.	STANDARD REPLACEMENT	RMA BASE TYPE	
1	RF Amp.	6BA6	6BA6	7BK	
2	Converter	6J6	6J6	7DF	
3	Voltage Reg.	VR150	VR150	4AJ	
4	Rectifier	5Y3GT	5Y3GT	ST	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING	REPLACEMENT DATA				IDENTIFICATION CODES AND INSTALLATION NOTES
		RME PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	SOLAR PART No.	
5A	CAP. 10	AF22J		UP1145	DY-2X10-45	EL210 ■ Filter
B	10 450					
6	.01 600		684-01	D7681	ST-6-01	TC-11 RF Bypass Power Supply
7	.01 600		684-01	D7681	ST-6-01	TC-11 Osc. Decoupling
8	.01 600		684-01	D7681	ST-6-01	TC-11 RF Screen Bypass
9	.01 600		684-01	D7681	ST-6-01	TC-11 RF Cathode
10	.25 300					
11	10 300					
12	40 300					
13	30 300					
14	25 300					
15	1000 500		1467-001	1465D1	PM-5-21	LFM-21 Osc. Grid Cap.
16	1.5 300					
17	20 300		1468-31	5W5T1	MO-5-31	LFM-31 Osc. Cathode Bypass
18	100 500					
19	15 300					

Note 1-Negative temperature coefficient.

Note 2-Negative temperature coefficient.

RESISTORS

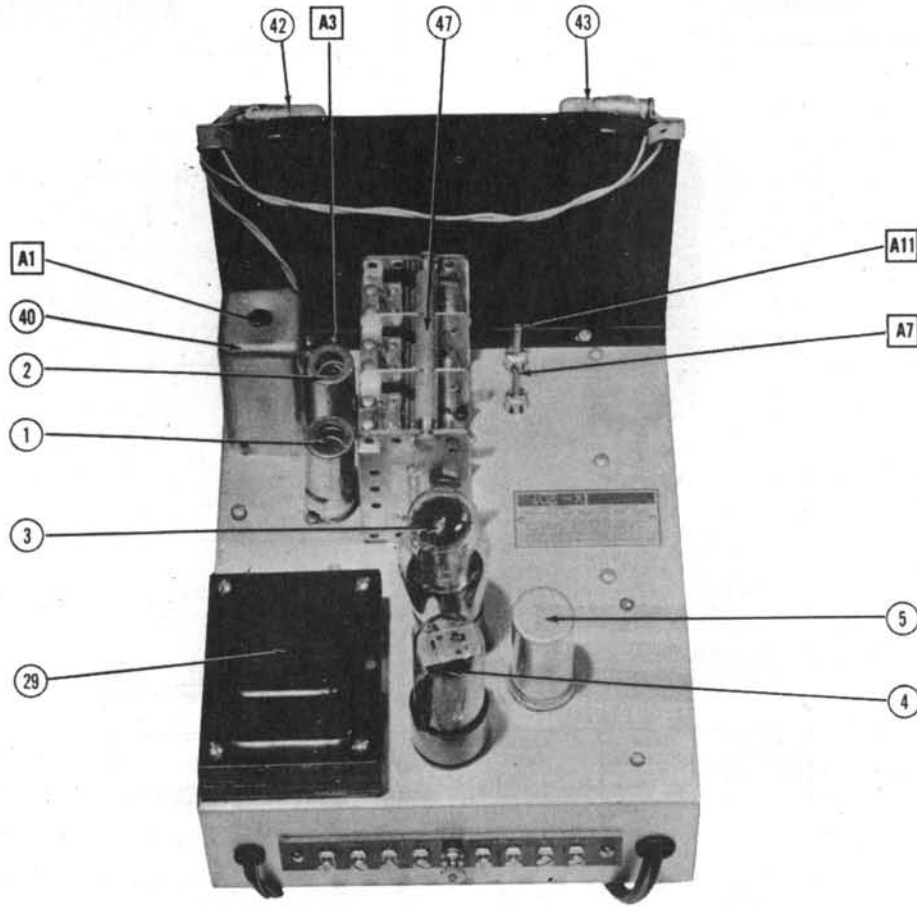
ITEM No.	RATING	REPLACEMENT DATA			IDENTIFICATION CODES
		RESISTANCE	WATTS	RME PART No.	
20	18K				
21	300K				
22	15K				
23	27K				
24	47K				
25	100K				
26	4700K				
27	18K				
28	350K				

Note-Some models use two 200K \pm W. resistors in parallel in this application.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA		
	PR	1	SEC. 2	SEC. 3	RME PART No.	STANCOR PART No.	THORDARSON PART No.
29	117V AC	250W	5.0V AC	6.3V AC			
	@ .38A	@ .05ADQ	@ 2.0A	@ 1.0A		P-947#	T22R04
							P-2357#

#Add series resistor to reduce plate voltage.



CHASSIS—BOTTOM VIEW

RF COILS

ITEM No.	USE	DC RES.		REPLACEMENT DATA	
		PRI.	SEC.	PME	MEISSNER
				PART No.	PART No.
	Ant. Coils				
31	20 Meter	Ω	.1Ω		
32	15 Meter	Ω	Ω		
33	10 Meter	Ω	Ω		
	RF Coils				
34	20 Meter	Ω	Ω		
35	15 Meter	Ω	Ω		
36	10 Meter	Ω	Ω		
	Osc. Coils				
37	20 Meter	Ω	Ω		
38	15 Meter	Ω	Ω		
39	10 Meter	Ω	Ω		
40	HF Coil	Ω	Ω		
41	Osc. Plate				
	Choke		42Ω		

MISCELLANEOUS

ITEM No.	PART NAME	RME PART No.	NOTES
44	Switch		Band
45	"		Changeover
46	"		Power On-Off
47	3. Gang Var. Cap.		Tuning

The output cable should be connected to the antenna terminal of the receiver. The cable has two shielded leads and a ground lead each ending in a terminal lug. On receivers which have provision for doublet operation, such as the RME-45 and the RME-84 the blue coded lead must be connected to the antenna terminal farthest from the ground terminal. This is the bottom side of the converter output. The red lead, or low side, must be connected to the antenna terminal nearest to the ground terminal. The ground braid should be connected to the receiver ground. On receivers not equipped for doublet operation, the blue lead should be connected to the antenna terminal and the red and ground (shield) leads should be connected to the receiver ground. This lead is coded white. Unless the above instructions are followed, the changeover switch will not operate properly.

